

WHAT IS CLAIMED IS:

1. A scintillator comprising a Group III nitride compound semiconductor.

5 2. A scintillator according to claim 1, wherein said Group III nitride compound semiconductor has a layer structure.

3. A scintillator according to claim 2, wherein a layer of said Group III nitride compound semiconductor is formed on a substrate.
10 a substrate.

4. A scintillator according to claim 3, wherein a buffer layer is formed between said substrate and said Group III nitride compound semiconductor layer.
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5. A scintillator according to claim 2, wherein said Group III nitride compound semiconductor layer has a hetero structure.

20 6. A scintillation counter including a scintillator according to claim 1.

7. A scintillation counter including a scintillator according to claim 2.

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8. A scintillation counter including a scintillator
according to claim 3.

9. A scintillation counter including a scintillator
5 according to claim 4.

10. A scintillation counter including a scintillator
according to claim 5.

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